In the claims:

1. (Amended) A method for screening a molecule, wherein said molecule is a chemical compound, or a drug which ~~have~~ has a synthetic lethal property, when in combination with a gene of interest carrying a non-lethal mutation, said method comprising the steps of:

i. transfecting a first reporter gene, as part of an integration plasmid, into mammalian cells having a genome comprising a gene of interest which carries a non-lethal mutation, or a genome which is null of said gene of interest;

ii. selecting clones stably expressing said first reporter gene;

iii. introducing into said cells a survival plasmid comprising a functioning copy of said gene of interest, a second reporter gene, selectable marker, an origin of DNA replication and a nuclear antigen gene essential for replication of the plasmid within said cells, wherein said survival plasmid is autonomously replicating and spontaneously lost from said cells;

vi. growing said cells in the presence of a selection compound which selects for said selectable marker;

vii. selecting cell clones stably expressing said second reporter gene and said functioning copy of said gene of interest;

viii. removing said selection compound, ~~for the~~ which selects for said selectable marker, and adding molecules destined for screening of their ability to impose selective pressure enforcing retention of the unstable survival plasmid.

ix. determining survival plasmid retention in cells by measuring the expression ratio of second's to first reporter gene, wherein, if the survival plasmid retains, the molecule has ~~thus identifying a molecule having~~ a synthetic lethal property when in combination with a non lethal mutated gene of interest.

2. (Original) The method according to Claim 1, wherein said selectable marker is a dominant selectable marker.

3. (Original) The method according to Claim 1, wherein said cells are human cells.

4. (Original) The method according to Claim 1, wherein said cells are rodent cells.

5. (Amended) The method according to Claim 1, wherein the products of said first reporter gene and second reporter gene are fluorescent proteins.

6. (Original) The method according to Claim 5, wherein the product of said first reporter gene has an excitation and/or emission peak which differs from the excitation and/ or emission peak of the product of said second reporter gene.

7. (Amended) The method according to Claim ~~1~~ 3, wherein said human cells are human cancer cells.

8. (Original) The method according to Claim 7, wherein said gene of interest is specifically incapacitated in human cancer cells.